

REMARKS

Claims 1-3, 5-11, 15 and 19-27 are now present in the application. Claims 1, 15, 20, 22 and 23 have been amended, and claim 27 has been added. Claims 1, 19 and 20 are independent. Reconsideration of this application, as amended, is respectfully requested.

Objection to the Disclosure

The disclosure stands objected to for several minor informalities. First, the Examiner asserts that the disclosure does not comply with 35 U.S.C. § 112, first paragraph. As the Examiner will note, page 5, the amendment to the paragraph beginning on line 5, at line 1 has been amended to change the word “on” to the word “by.” Accordingly, the Examiner’s objection under 35 U.S.C. § 112, first paragraph has been overcome.

With regard to the Summary of the Invention section, the Examiner asserts that the description of the claimed invention is not consistent in scope with the claimed invention. It is respectfully pointed out that the description in the Summary of the Invention section is narrower than the above-mentioned claims, therefore it is not inconsistent in scope with the claims. Merely providing the Summary of the Invention section broader than the claims does not make this Summary of the Invention section inconsistent. However, if the Examiner would prefer that Applicants rewrite the Summary of the Invention section to include the current claim language, Applicants would be happy to do so. However, it is requested that these amendments be held in

abeyance until the claims in the application are indicated as being allowable by the Examiner.

In view of the above amendments and remarks, Applicants respectfully submit that the disclosure is in proper form. Accordingly, reconsideration and withdrawal of the above objections are respectfully requested.

Objection to the Drawings

The drawings stand objected to under 37 C.F.R. § 1.83(a) since not illustrating every feature of the invention specified in the claims. Although Applicants do not agree with the Examiner, in order to expedite prosecution in the present application, a Letter to the Official Draftsperson has been provided for the Examiner's consideration. In the Letter to the Official Draftsperson, Figures 15 and 16 have been added in order to clearly illustrate the inventions recited in claims 3 and 7 of the present invention. The specification has also been amended at page 6, line 11 and page 24, line 19 in order to provide reference to Figures 15 and 16. The Brief Description of the Drawings section has also been amended to include a description of the additional figures. It is respectfully requested that the Examiner approve the drawing correction attached to the Letter to the Official Draftsperson.

With regard to claim 5, Applicants respectfully submit that Figure 8 completely illustrates all of the features specified in this claim. Specifically, "an almost entire surface of said absorbent sheet is overlaid with said top layer" since the absorbent sheet is

in face-to-face contact with the top layer except for the portion where the absorbent body 81 is located.

With regard to dependent claim 15, Applicants respectfully submit that this subject matter is clearly illustrated in Figure 8. It should be noted that it has been clarified in amended claim 1 that the projecting portion is formed by the absorbent pad.

With regard to independent claim 20, Applicants submit that this claim is clearly illustrated in Figure 14 of the present invention. It has also been clarified in this claim that the projecting portion is formed by the auxiliary pad.

With regard to claims 22 and 23, it has been clarified in these claims that the barrier cuffs are located at a spaced location from longitudinal edges of the "first" absorbent member. Accordingly, Applicants submit that these claims are clearly illustrated in Figure 14.

With regard to claim 26, Applicants respectfully submit that this claim is clearly illustrated in Figure 14, since the second absorbent member 31' does not extend to the longitudinal edges of the first top layer 10.

In view of the above amendments and remarks, Applicants respectfully submit that the drawings illustrate every feature of the invention specified in the claims. Accordingly, reconsideration and withdrawal of the drawing objection under 37 C.F.R. § 1.83(a) are respectfully requested.

Objection under 37 C.F.R. § 1.121

At paragraph 6 of the Examiner's Office Action, the Examiner indicates that the marked up version of claim 5 does not comply with 37 C.F.R. § 1.121 since all of the changes made to the previous claim 5 to arrive at the new claim has not been provided. As the Examiner will note, claim 5 has not been amended by the present amendment, but the version with markings attached to the present Amendment includes the amendments to claim 5 which were presented by the Amendment dated June 13, 2002. Accordingly, Applicants submit that the amendment to claim 5 complies with 37 C.F.R. § 1.121.

Rejection under 35 U.S.C. § 112, first paragraph

Claims 7, 15, 20, 22, 23, 25 and 26 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. This rejection is respectfully traversed.

With regard to claim 7, the Examiner is directed to page 6, lines 11-17 of the present specification and additional Figure 16 which clearly illustrates the single absorbent sheet being constructed of a superabsorbent polymer a between a pair of paper or nonwoven fabric b. Accordingly, the subject matter of claim 7, lines 1-3 is sufficiently described in the specification. It should be noted that the paper or nonwoven fabric is not an absorbent material, therefore the fact that independent claim 1 recites "only a single absorbent sheet" does not conflict with dependent claim 7.

With regard to claims 1 and 20, as mentioned above, these claims have been clarified to indicate that the absorbent pad and the auxiliary pad form a projecting portion. Accordingly, these claims are sufficiently described in the specification.

With regard to claims 22 and 23, as the Examiner will note, these claims have been amended to clarify that the barrier cuffs are located at a spaced location from longitudinal edges of the "first" absorbent member. Accordingly, these claims are also sufficiently described in the specification.

In view of the above amendments and remarks, Applicant respectfully submit that claims 1, 7, 15, 20, 22, 23, 25 and 26 are sufficiently described in the specification. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, first paragraph are respectfully requested.

Objection to the Claims

Claim 7 stands objected to for a minor informality. As the Examiner will note, claim 7 has been amended in the manner suggested by the Examiner. Accordingly, the claim objection has been obviated. Reconsideration and withdrawal of this objection are respectfully requested.

Rejection under 35 U.S.C. § 112, second paragraph

Claims 1-3, 5-11, 15 and 19-26 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which Applicants regard as the invention. This rejection is respectfully traversed.

With regard to claim 1, it is respectfully pointed out that claim 1 has been clarified to recite that the absorbent pad forms the projecting portion. The Examiner also questions whether the absorbent sheet is part of the absorbent member or not, Applicants respectfully submit that claim 1 of the present invention is clear with regard to this fact. Specifically, independent claim 1 recites "said absorbent member being arranged to form (a) an opposing pair of barrier cuffs which are within longitudinal edges of said top layer and extend along the longitudinal edges, said pair of barrier cuffs being formed by integrally folding a single absorbent sheet and said top layer." Since the absorbent member is arranged to form the opposing pair of barrier cuffs and the barrier cuffs are formed by folding only a single absorbent sheet and the top layer, Applicants respectfully submit that it is clear that the absorbent sheet is a part of the absorbent member.

With regard to claim 20, as mentioned above, claim 20 has been amended to clarify that the projecting portion is formed by the auxiliary pad. Furthermore, claim 20 has been amended to delete the word "planer" therefrom to remove any inconsistency from claim 20.

With regard to claims 22 and 23, these claims have been amended to clarify that it is the first absorbent member that is being referred to in these claims.

In view of the above amendments and remarks, Applicants respectfully submit that claims 1-3, 5-11, 15 and 19-26 are definite and clear. Accordingly, reconsideration

and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph are respectfully requested.

Rejections under 35 U.S.C. §§ 102 and 103

Claims 1, 8, 10, 15 and 24 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Runeman et al., U.S. Patent No. 5,342,337. Claims 1-3, 8-11, 15 and 24 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Roessler et al., U.S. Patent No. 5,405,342. Claims 1, 3, 8-11, 21 and 24 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Yoshimura et al., JP '553. Claims 2 and 3-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshimura et al. in view of Canadian International. Claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshimura et al. and Canadian International as applied to claim 5 above, and further in view of Roessler et al. '342, Molnlycke '582 and P & G '326. These rejections are respectfully traversed.

The present invention is directed to an absorbent article, wherein a combination of elements are recited including "an opposing pair of barrier cuffs which are within longitudinal edges of said top layer," "a pocket portion" and "a projecting portion located between said barrier cuffs on a skin contactable surface side of said pocket portion along the longitudinal direction of said barrier cuffs." Furthermore, the pair of barrier cuffs is formed by integrally folding only a single absorbent sheet and said top layer. Independent claim 1 of the present invention exemplifies the above aspects of the present invention.

With the construction according to the present invention, due to the barrier cuffs, body fluid is prevented from flowing out of the pocket portion. Furthermore, the projecting portion more effectively prevents this from occurring. Furthermore, since the central portion of the article is rigidly increased by the projecting portion, twisting can be prevented. Applicants respectfully submit that the references relied by the Examiner fail to teach the structure recited by the present invention and therefore cannot accomplish the above advantages of the present invention.

In particular, Runeman et al. is directed to a disposable absorbent article which includes an absorbent pad 3 which comprises an outer layer and an inner layer arranged on the outer layer. The inner layer includes a hose-like body 5 and two side-bodies 6. The side-bodies 6 are arranged at the lateral sides of the hose-like body 5. In the Examiner's Office Action, the Examiner refers to Figure 3 of the Runeman et al. reference and considers the layer 4 to be the absorbent sheet recited in independent claim 1. However, Figure 3 of Runeman et al. also includes side-bodies 6, which are folded along with the layer 4. In view of this, Runeman et al. does not disclose "only" a single absorbent sheet in the barrier cuffs as required by amended independent claim 1. Accordingly, the Runeman et al. reference fails to anticipate independent claim 1 of the present invention.

With regard to the Roessler et al. reference, the Examiner considers the layer 50 to be the absorbent sheet recited in independent claim 1. Applicants respectfully submit that this reference also fails to teach amended independent claim 1 of the present

invention, since the barrier cuffs in Roessler et al. also include the absorbent body 44 within the barrier cuffs.

With regard to the Yoshimura et al., JP '553 reference, as the Examiner will note, in addition to the above, independent claim 1 has been amended to recite "said projecting portion being formed by an absorbent pad." Referring to Figures 4 and 12 of the Examiner's Office Action, the Examiner has considered the absorbent layer 3 to be the absorbent sheet of the present invention, which is folded with the top layer to form the pair of barrier cuffs. In view of this, the Yoshimura et al. JP '553 reference fails to disclose a projecting portion formed by an absorbent pad, in addition to a folded absorbent sheet as required by independent claim 1 of the present invention. Accordingly, the Yoshimura et al. reference fails to anticipate independent claim 1 of the present invention.

With regard to dependent claims 2, 3, 5-11, 15, 21 and 24, Applicants respectfully submit that these claims are allowable due to their dependence upon allowable independent claim 1, as well as for the additional limitations recited by these claims.

With regard to the Examiner's reliance on the Canadian International, Molnlycke '582 and P & G '326 references, Applicants respectfully submit that these references also fail to teach forming barrier cuffs by "integrally folding only a single absorbent sheet and said top layer" as required by independent claim 1 of the present invention. Accordingly, these references fail to make up for the deficiencies of Runeman et al., Roessler et al. and Yoshimura et al.

In view of the above amendments and remarks, Applicants respectfully submit that claims 1-3, 5-11, 15, 21 and 24 clearly define the present invention over the references relied by the Examiner. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. §§ 102 and 103 are respectfully requested.

Additional Claim

Additional claim 27 has been added for the Examiner's consideration. Applicants respectfully submit that this claim is allowable due to its dependence upon allowable independent claim 1, as well as for the additional limitations recited by this claim. Favorable consideration and allowance of the additional claim 27 are respectfully requested.

Allowable Subject Matter

Claims 19, 20, 22, 23, 25 and 26 have been indicated by the Examiner as including allowable subject matter. Applicants greatly appreciate the indication of the allowable subject matter by the Examiner. Since claims 20, 22 and 23 have been amended only to address the Examiner's rejections under 35 U.S.C. § 112, it is believed that these claims are still in condition for allowance.

CONCLUSION

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently pending rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

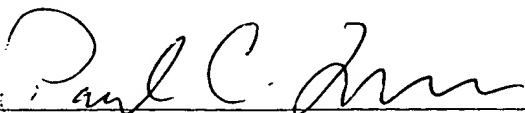
In the event there are any matters remaining in this application, the Examiner is invited to contact Paul C. Lewis, Registration No. 43,368 at (703) 205-8000 in the Washington, D.C. area.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By: 

John W. Bailey

Reg. No. 32,881

P. O. Box 747

Falls Church, VA 22040-0747

(703) 205-8000

JWB/PCL

Attachment: Version with Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

The paragraphs immediately after line 22 on page 3 has been added:

--Fig. 15 is a sectional view, corresponding to Fig. 8 of the sixth embodiment showing an absorbent article according to another embodiment of the present invention; and

Fig. 16 is a sectional view of one embodiment of the absorbent member according to the present invention.--

The paragraph beginning on page 3, line 19, has been amended as follows:

--Fig. 13 is a sectional view, corresponding to Fig. 2 of the first embodiment, showing an absorbent article according to another embodiment of the present invention; [and]--

The paragraph beginning on page 3, line 21, has been amended as follows:

--Fig. 14 is a sectional view, corresponding to Fig. 2 of the first embodiment, showing an absorbent article according to another embodiment of the present invention[.];--

The paragraph beginning on page 5, line 5, has been amended as follows:

--Almost an entire surface of the absorbent sheet 31 is overlaid [on]by the top layer 10, and the absorbent sheet 31 and the top layer 10 are folded integrally. The above-mentioned barrier cuffs 40, 40 are formed by the absorbent sheet 31 and the top layer 10. In other words, the absorbent article includes means for attaching the top layer 10 to the liquid retentive member 30 (the absorbent sheet 31). The overlaid structure of

the absorbent sheet 31 and top sheet 10 may be achieved by attachment using an adhesive agent or heat sealing, aside from a simple placement of the top layer 10 upon the absorbent sheet 31. The barrier cuffs 40, 40 are located apart from each other and the above-mentioned pocket portion 50 is formed therebetween. The absorbent member 30 (the absorbent sheet 31) includes means for attaching portions adjacent the barrier cuffs 40,40 (i.e. portions which are located outside the barrier cuffs 40,40) to the back layer 20. The barrier cuffs 40,40 are spaced apart from the back layer 20. The means for attaching the portions adjacent the barrier cuffs 40, 40 to the back layer 20 includes at least one of an adhesive agent and heat sealing.--

The paragraph beginning on page 6, line 11, has been amended as follows:

--The absorbent sheet 31 can be absorbent paper, nonwoven fabric, a pulp sheet made of fibers and a binder, fluff pulp, a sheet obtainable by interposing a superabsorbent polymer a between a pair of paper or nonwoven fabric b (see Fig. 16), a sheet made of a mixture of a fiber (especially, hydraulic fiber), a binder and a superabsorbent polymer, and the like. A sheet obtained by admixing a superabsorbent polymer and fiber is preferred for its absorptivity for body fluid. The superabsorbent polymer in such a sheet may be dispersed either in layers or in three dimensions.--

The paragraph beginning on page 24, line 19, has been amended as follows:

--Furthermore, the fourth embodiment of Fig. 6, the fifth embodiment of Fig. 7 and the sixth embodiment of Fig. 8, and so forth, may include the same elastic members 70 as in the second embodiment of Figs. 3 and 4. For example, Fig. 15 illustrates the sixth embodiment, which includes elastic members 70.--

IN THE CLAIMS

Claim 15 has been canceled.

The claims have been amended as follows:

1. (THREE TIMES AMENDED) An absorbent article comprising:

a liquid-permeable top layer;

a liquid-impermeable back layer;

a liquid retentive absorbent member, interposed entirely between said top layer and said back layer, said absorbent member being arranged to form (a) an opposing pair of barrier cuffs which are within longitudinal edges of said top layer and extend along the longitudinal edges, said pair of barrier cuffs being formed by integrally folding only a single absorbent sheet and said top layer, and (b) a pocket portion formed between said pair of barrier cuffs; and

a projecting portion located between said barrier cuffs on a skin contactable surface side of said pocket portion along the longitudinal direction of said barrier cuffs, said projecting portion being formed by an absorbent pad.

5. (AMENDED) The absorbent article according to claim 1, wherein said [absorbent member includes an] absorbent sheet [having]has a thickness of 0.3 mm to 5 mm, and an almost entire surface of said absorbent sheet is overlaid with said top layer.

15. (AMENDED) The absorbent article of claim 1, wherein said absorbent sheet supports [an] said absorbent pad, [said absorbent pad is disposed between said barrier cuffs,] and said absorbent sheet is disposed between said absorbent pad and said back layer.

20. (THREE TIMES AMENDED) An absorbent article comprising:

- a first liquid-permeable top layer;
- a liquid impermeable back layer;
- a first liquid retentive absorbent member interposed entirely between said first liquid-permeable top layer and said liquid impermeable back layer;
- a second liquid-permeable top layer;
- a second liquid retentive absorbent member enclosed by said second liquid-permeable top layer, said second liquid retentive absorbent member includes a single planar pad and an auxiliary pad, said second liquid retentive absorbent member including an opposing pair of barrier cuffs which are within longitudinal edges of said first liquid-permeable top layer and extend along longitudinal edges of said first liquid-permeable top layer, said pair of barrier cuffs being formed by integrally folding said single planar pad and said second liquid-permeable top sheet, and a pocket portion formed between said pair of barrier cuffs;
- means for securing said second [top] liquid-permeable top layer to said first liquid-permeable top layer; and

a projecting portion located between said barrier cuffs on a skin contactable surface side of said pocket portion along the longitudinal direction of said barrier cuffs, said projecting portion being formed by said auxiliary pad.

22. (AMENDED) The absorbent article according to claim 19, wherein said barrier cuffs are located at a spaced location from longitudinal edges of said [second]first absorbent member.

23. (AMENDED) The absorbent article according to claim 20, wherein said barrier cuffs are located at a spaced location from longitudinal edges of said [second]first absorbent member.

Claim 27 has been added.